What is claimed is:

1. A clamping device comprising a scaled rod, a movable jaw connected to a distal end of said scaled rod, an operating handle pivotally connected at an upper end to said clamping device via a supporting point, and a transmission mechanism for moving said scaled rod and said movable jaw at the same time; said transmission mechanism including a housing that is pivotally fixed to said operating handle below said supporting point, and provided with an internal passage for said scaled rod to extend therethrough and an upper cavity obliquely extended from said internal passage in a predetermined rearward and upward direction to locate above said scaled rod, so that a lower open end of said upper cavity is communicating with said internal passage; and said transmission mechanism also including a lower cavity located in said clamping device below said scaled rod and in front of said upper cavity by a predetermined distance, and said lower cavity being obliquely extended rearward and downward at a predetermined angle and having an upper open end.

2. The clamping device as claimed in claim 1, further comprising a first steel ball and a first compression

spring sequentially positioned in said upper cavity in said housing, so that said first steel ball is normally pushed forward by said first compressing spring to press against an inner surface of said lower open end of said upper cavity and an upper side of said scaled rod.

3. The clamping device as claimed in claim 1, further comprising a second steel ball and a second compression spring sequentially positioned in said lower cavity.

4. The clamping device as claimed in claim 3, further comprising a push button closely located in front of said lower cavity.

5. The clamping device as claimed in claim 4, wherein said push button includes an expanded head, a stem downward extended from said expanded head into said clamping device, and a projection provided at a predetermined position on said stem; and said projection having a beveled lower surface that is normally in contact with said second steel ball in said lower cavity.

6. The clamping device as claimed in claim 3, wherein

said second steel ball is normally pushed forward by said second compressing spring to press against an inner surface of said upper open end of said lower cavity, and a lower side of said scaled rod.

7. The clamping device as claimed in claim 5, wherein said second steel ball is normally pushed forward by said second compressing spring to press against an inner surface of said upper open end of said lower cavity, a lower side of said scaled rod, and said beveled lower surface of said projection of said push button.